

2007/04/11

**ADDENDUM NO. 1
TO
CONTRACT DOCUMENTS AND SPECIFICATIONS
FOR
LINCOLN WASTEWATER SYSTEM
NORTHEAST SALT CREEK BASIN TRUNK SEWER**

**Specification No. 07-117
HDR Project No. 44333
City Project No. 701291**

DATE OF ISSUE: April 11, 2007

TO: PROSPECTIVE BIDDERS AND OTHER INTERESTED PARTIES

THE BIDDING AND CONTRACT DOCUMENTS AND SPECIFICATIONS, INCLUDING THE CONTRACT DRAWINGS, ARE HEREBY MODIFIED BY THE FOLLOWING ITEMS:

CHANGES TO SPECIFICATIONS

AD-1 Item 1 TABLE OF CONTENTS

A. Page Table of Contents-1:

1. INSERT "02669 REINFORCED CONCRETE PIPE" under DIVISION 2 – SITE WORK

and

INSERT attached Specification SECTION 02669 – REINFORCED CONCRETE PIPE as an amendment to the specifications.

AD-1 Item 2 SECTION 00020 – NOTICE TO BIDDERS

A. Page 00020-1:

1. DELETE "F.W. Dodge Corporation
11422 Miracle Hills Drive
Omaha, Nebraska 68144"

INSERT "McGraw Hill – Dodge Reports
8529 'K' Street
Omaha, Nebraska 68134"

AD-1 Item 3 INSTRUCTIONS TO BIDDERS

1. DELETE the INSTRUCTIONS TO BIDDERS document dated 05/01/06 in its entirety and INSERT the attached INSTRUCTIONS TO BIDDERS document dated 03/09/07.

AD-1 Item 4 SECTION 00100 – SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

A. Page 00100-4:

1. DELETE "13.2 Article 10.2:" and INSERT "13.2 Article 11.2:"

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AD-1 Item 5 SECTION 00301 – PROPOSAL FOR CONTRACT CONSTRUCTION WORK

A. Page 00301-4:

1. DELETE the PROPOSAL FOR CONTRACT CONSTRUCTION WORK document dated 2007/03/21 in its entirety and INSERT the attached PROPOSAL FOR CONTRACT CONSTRUCTION WORK document dated 2007/04/09.

AD-1 Item 6 SECTION 01060 – PROJECT REQUIREMENTS

A. Page 01060-10:

1. INSERT in 1.20 EASEMENTS AND RIGHTS-OF-WAY

“3. Delays due to easement acquisition:

- a. The contractor may be delayed from beginning work on specific private properties on the project until right-of-way/easements are acquired. Construction shall be scheduled to complete all other allowable work for the project. Contractor cannot claim a monetary delay due to easements not being acquired.”

AD-1 Item 7 SECTION 01065 – MEASUREMENT AND PAYMENT

A. Page 01065-5:

1. Bid Item 16. 36” Sanitary Sewer Pipe DELETE “within steel pipe casings, and within stream crossings” and DELETE “all casing spacers; filling of the annular space between the sewer pipe and the steel casing pipe; end closures for steel casing”

AD-1 Item 8 SECTION 01065 – MEASUREMENT AND PAYMENT

A. Page 01065-7:

1. Bid Item 37. Over Excavation and Trench Stabilization/Foundation Material DELETE “The pay item is one (1) cubic yard of overexcavation and trench stabilization/foundation material with filter fabric as specified.” and INSERT “Payment shall be made on the basis of the unit price bid per ton of trench stabilization/foundation material with filter fabric as specified.”

AD-1 Item 9 SECTION 01065 – MEASUREMENT AND PAYMENT

A. Page 01065-7:

1. INSERT the following bid items and descriptions for the following added bid items:

48” Sanitary Sewer Pipe – See Item 16 above (36” Sanitary Sewer Pipe)

18” Sanitary Sewer Pipe – See Item 16 above (36” Sanitary Sewer Pipe)

7’ Diameter Reinforced Manhole – See Item 20 above (Standard Manhole Type “G”)

7’ Diameter Reinforced Manhole – See Item 20 above (Standard Manhole Type “G”)

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Plug for 48" Sewer Stubout -- Payment for 48" diameter sewer stub out plug shall be made on the basis of the unit price bid for each plug. Payment shall be full compensation for furnishing and installing a plug as indicated on the drawings and specifications.

Plug for 18" Sewer Stubout - Payment for 48" diameter sewer stub out plug shall be made on the basis of the unit price bid for each plug. Payment shall be full compensation for furnishing and installing a plug as indicated on the drawings and specifications.

AD-1 Item 10 SECTION 02725 - DRY AUGERED CASED UNDERCROSSINGS

A. Page 02725-2:

1. DELETE 2.1 A. 1. a. "Casing pipe must be a minimum of 0.344" thickness, 48" in diameter." and INSERT "Casing pipe must be a minimum of 0.344" thickness, 48" in diameter for all approved pipe materials excluding reinforced concrete pipe. The casing pipe must be a minimum of 0.375" thickness, 54" in diameter for an RCP carrier pipe."

CHANGES TO DRAWINGS

AD-1 Item 11 Sheet 2 - SUMMARY OF QUANTITIES

A. INSERT the following bid items into the Summary of Quantities table:

48" Sanitary Sewer Pipe	LF	60
18" Sanitary Sewer Pipe	LF	10
7' Diameter Reinforced Manhole	EA	2
7' Diameter Reinforced Manhole	VF	30
Plug for 48" Sewer Stubout	EA	1
Plug for 18" Sewer Stubout	EA	1

REVISE the following bid item quantities in the Summary of Quantities table:

36" Sanitary Sewer Pipe, Trenchless Installation	from "260 LF" to "280 LF"
36" Sanitary Sewer Pipe	from "6727 LF" to "6744 LF"
15" Sanitary Sewer Pipe	from "20 LF" to "28 LF"
8" Sanitary Sewer Pipe	from "10 LF" to "20 LF"
Standard Manhole, Type 'G'	from "13 EA" to "12 EA"
Standard Manhole, Type 'G'	from "202 VF" to "187 VF"
Seeding, Type 'F'	from "19.9" to "21.1"
Plug for 15" Sewer Stubout	from "2 EA" to "1 EA"
Plug for 8" Sewer Stubout	from "1 EA" to "2 EA"

AD-1 Item 12 Sheet 11 - HORIZONTAL AND VERTICAL CONTROL

A. Sanitary Sewer point #11 DELETE:

P.I. STA 132+57.02 - NEW MANHOLE 7
 N=231753.04 E=180304.99
 36" DIA SANITARY SEWER
 DEF. ANG. = 90° 09' 31.03" LT
 15" DIA SANITARY SEWER STUBOUT
 DEF. ANG. = 89° 50' 28.7" RT

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INSERT

P.I. STA 132+57.58 AII – NEW MANHOLE 7
N=231742.74 E=180304.96
48" DIA SANITARY SEWER
DEF. ANG. = 90° 09' 31.03" LT
15" DIA SANITARY SEWER STUBOUT
DEF. ANG. = 89° 50' 28.7" RT

B. INSERT Sanitary Sewer point #11A:

P.I. STA 133+07.58 – NEW MANHOLE 7A
N=231743.05 E=180254.96
48" DIA SANITARY SEWER TO 36" DIA SANITARY SEWER
DEF. ANG. = 0° 00' 00.0" LT
48" DIA SANITARY SEWER STUBOUT
DEF. ANG. = 90° 00' 00.0" LT

C. Sanitary Sewer point #12 DELETE:

P.I. STA 139+25.84 – NEW MANHOLE 8
N=231753.04 E=179636.18
36" DIA SANITARY SEWER
DEF. ANG. = 10° 30' 52.52" LT
12" DIA SANITARY SEWER STUBOUT
DEF. ANG. = 90° 00' 00.0" RT

INSERT

P.I. STA 139+58.21 – NEW MANHOLE 8
N=231747.13 E=179604.35
36" DIA SANITARY SEWER
DEF. ANG. = 10° 30' 52.52" LT
12" DIA SANITARY SEWER STUBOUT
DEF. ANG. = 90° 00' 00.0" RT

D. INCLUDE the following for Sanitary Sewer point #16:

8" DIA SANITARY SEWER STUBOUT
DEF. ANG. = 45° 00' 00.0" RT

E. INCLUDE the following for Sanitary Sewer point #17:

8" DIA SANITARY SEWER STUBOUT
DEF. ANG. = 90° 00' 00.0" LT

F. Sanitary Sewer point #18 DELETE:

P.I. STA 173+93.28 – NEW MANHOLE 14
N=231773.45 E=176208.22
36" DIA SANITARY SEWER STUBOUT
DEF. ANG. = 24° 41' 02.28" LT
15" DIA SANITARY SEWER STUBOUT
DEF. ANG. = 65° 18' 57.72" RT

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INSERT

P.I. STA 173+93.28 - NEW MANHOLE 14
N=231773.45 E=176208.22
36" DIA SANITARY SEWER STUBOUT
DEF. ANG. = 24° 41' 02.28" LT
18" DIA SANITARY SEWER STUBOUT
DEF. ANG. = 65° 18' 57.72" RT
15" DIA SANITARY SEWER STUBOUT
DEF. ANG. = 102° 20' 24.0" LT

AD-1 Item 13 QUESTIONS BY BIDDERS

Q. What is the size of the tee based manhole tee and riser?

A. The tee based manhole will consist of a 36"x36" tee with a 36" diameter manhole riser.

Q. Is the tee based manhole riser encased in concrete to the top of the manhole?

A. Yes, the tee based manhole riser is encased in a minimum of 12 inch concrete to the base of the Pre-Cast Manhole Lid per Detail B on Plan Sheet 10.

AD-1 Item 14 WASTEWATER PLAN AND PROFILE

- A. DELETE Plan Sheets 22, 23, 24, 29, and 31; and INSERT new Plan Sheets 22, 23, 24, 29, and 31 provided.

AD-1 Item 15 SHEET 1-AD - MANHOLE TO SIPHON STRUCTURE CONNECTION DETAIL

- A. ADD Sheet 1-AD - MANHOLE TO SIPHON STRUCTURE CONNECTION DETAIL to the Contract Drawings.

AD-1 Item 16 CHANGES TO DRAWINGS

- A. Any changes to the Contract Drawings addressed in Addendum No. 1 and necessary to fully incorporate the revisions provided for in Addendum No. 1 will be revised in the Conformed for Construction drawings issued after award of the Contract. These items include revisions to Plan Sheets related to those provided in Addendum No. 1 but not shown. Addendum No. 1 addresses all known changes to the project quantities and sewer alignment.

ALL ITEMS IN CONFLICT WITH THE ADDENDA ARE HEREBY DELETED.

THIS ADDENDUM IS MADE PART OF THE BIDDING AND CONTRACT DOCUMENTS AND SHALL BE NOTED ON THE PROPOSAL.

HDR ENGINEERING, INC.


Kent Prior, P.E.



INSTRUCTIONS TO BIDDERS

CITY OF LINCOLN, NEBRASKA

1. BIDDING PROCEDURE

- 1.1 Bidder shall submit one (1) complete set of the bid documents and all supporting material, unless otherwise stipulated. All appropriate blanks shall be completed. Any interlineation, alteration or erasure on the specification document shall be initialed by the signer of the bid. Bidder shall not change the proposal form nor make additional stipulations on the specification document. Any amplified or qualifying information shall be on the bidder's letterhead and firmly attached to the specification document.
- 1.2 Bid prices shall be submitted on the Proposal Form included in the bid document.
- 1.3 Bidders may submit a bid on an "all or none" or "lump sum" basis, but should also submit a quotation on an item-by-item basis. Bidding documents shall be clearly marked indicating the kind of proposal being submitted.
- 1.4 Any person signing a bid for a firm, corporation, or other organization must show evidence of his authority so to bind such firm, corporation, or organization.
- 1.5 Bids received after the time and date established for receiving bids will be rejected.
- 1.6 If bidding on a Construction Contract, the City of Lincoln's Standard Specifications for Municipal Construction 2006 shall apply.
 - 1.6.1 Bidders may obtain this document from the City's Design Engineering Division of Public Works & Utilities for a small fee.
 - 1.6.2 Said document can be reviewed at Design Engineering or the Purchasing Division.
 - 1.6.3 The Standard Conditions are available on the web site.
<http://www.lincoln.ne.gov/city/pwoc/engine/const/standard/sndspec/index.htm>

2. BIDDER'S SECURITY

- 2.1 Bid security, as a guarantee of good faith, in the form of a certified check, cashier's check, or bidder's bond, may be required to be submitted with this bid document, as indicated on the Proposal Form.
- 2.2 If alternates are submitted, only one bid security will be required, provided the bid security is based on the amount of the highest gross bid.
- 2.3 Such bid security will be returned to the unsuccessful bidders when the award of bid is made.
- 2.4 Bid security will be returned to the successful bidder(s) as follows:
 - 2.4.1 For single order bids with specified quantities: upon the delivery of all equipment or merchandise, and upon final acceptance by the City.
 - 2.4.2 For all other contracts: upon approval by the City of the executed contract and bonds.
- 2.5 City shall have the right to retain the bid security of bidders to whom an award is being considered until either:
 - 2.5.1 A contract has been executed and bonds have been furnished.
 - 2.5.2 The specified time has elapsed so that the bids may be withdrawn.
 - 2.5.3 All bids have been rejected.
- 2.6 Bid security will be forfeited to the City as full liquidated damages, but not as a penalty, for any of the following reasons, as pertains to this specification document:
 - 2.6.1 If the bidder fails to deliver the equipment or merchandise in full compliance with the accepted proposal and specifications.
 - 2.6.2 If the bidder fails or refuses to enter into a contract on forms provided by the City, and/or if the bidder fails to provide sufficient bonds or insurance within the time period as established in this specification document.

3. BIDDER'S REPRESENTATION

- 3.1 Each bidder by signing and submitting a bid, represents that the bidder has read and understands the specification documents, and the bid has been made in accordance therewith.
- 3.2 Each bidder for services further represents that the bidder has examined and is familiar with the local conditions under which the work is to be done and has correlated the observations with the requirements of the bid documents.

4. CLARIFICATION OF SPECIFICATION DOCUMENTS

- 4.1 Bidders shall promptly notify the Purchasing Agent of any ambiguity, inconsistency or error which they may discover upon examination of the specification documents.
- 4.2 Bidders desiring clarification or interpretation of the specification documents shall make a written request which must reach the Purchasing Agent at least five (5) calendar days prior to the date and time for receipt of bids.

- 4.3 Changes made to the specification documents will be made by written addenda to all known prospective bidders and posted on the City-County website at lincoln.ne.gov Keyword - Bid.
- 4.4 Oral interpretations or changes to the Specification Documents made in any other manner, will not be binding on the City; and bidders shall not rely upon such interpretations or changes.

5. ADDENDA

- 5.1 Addenda are written instruments issued by the City prior to the date for receipt of bids which modify or interpret the specification document by addition, deletion, clarification or correction.
- 5.2 Copies of addenda will be made available for inspection at the office of the Purchasing Agent and on the City-County website.
- 5.3 No addendum will be issued later than forty-eight (48) hours prior to the date and time for receipt of bids, except an addendum withdrawing the invitation to bid, or an addendum which includes postponement of the bid.
- 5.4 Bidders shall ascertain prior to submitting their bid that they have received all addenda issued, and they shall acknowledge receipt of addenda on the proposal form.

6. INDEPENDENT PRICE DETERMINATION

- 6.1 By signing and submitting this bid, the bidder certifies that the prices in this bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder prior to bid opening directly or indirectly to any other bidder or to any competitor; no attempt has been made, or will be made, by the bidder to induce any person or firm to submit, or not to submit, a bid for the purpose of restricting competition.

7. ANTI-LOBBYING PROVISION

- 7.1 During the period between the bid advertisement date and the contract award, bidders, including their agents and representatives, shall not lobby or promote their bid with any member of the City Council or City Staff except in the course of City-sponsored inquiries, briefings, interviews, or presentations, unless requested by the City.

8. BRAND NAMES

- 8.1 Wherever in the specifications or proposal form brand names, manufacturer, trade name, or catalog numbers are specified, it is for the purpose of establishing a grade or quality of material only; and the term "or equal" is deemed to follow.
- 8.2 It is the bidder's responsibility to identify any alternate items offered in the bid, and prove to the satisfaction of the City that said item is equal to, or better than, the product specified.
- 8.3 Bids for alternate items shall be stated in the appropriate brand on the proposal form, or if the proposal form does not contain blanks for alternates, bidder MUST attach to the specification documents on Company letterhead a statement identifying the manufacturer and brand name of each proposed alternate, plus a complete description of the alternate items including illustrations, performance test data and any other information necessary for an evaluation. The bidder must indicate any variances by item number from the specification document no matter how slight. Bidder must fully explain the variances from the specification document, since brochure information may not be sufficient.
- 8.4 If variations are not stated in the proposal, it will be assumed that the item being bid fully complies with the City's specifications.

9. DEMONSTRATIONS/SAMPLES

- 9.1 Bidders shall demonstrate the exact item(s) proposed within seven (7) calendar days from receipt of such request from the City.
- 9.2 Such demonstration can be at the City delivery location or a surrounding community.
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- 9.4 If items are small and malleable, the bidder is proposing an alternate product, the bidder MUST supply a sample of the exact item. Samples will be returned at bidder's expense after receipt by the City of acceptable goods. Bidders must indicate how samples are to be returned.

10. DELIVERY (Non-Construction)

- 10.1 Each bidder shall state on his proposal form the date upon which he can make delivery of all equipment or merchandise.
- 10.2 The City reserves the right to cancel orders, or any part thereof, without obligation, if delivery is not made within the time(s) specified on the proposal form.

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2007/04/10

SECTION 00301
PROPOSAL FOR CONTRACT CONSTRUCTION WORK
IN CONNECTION WITH
NORTHEAST SALT CREEK BASIN TRUNK SEWER
LINCOLN WASTEWATER SYSTEM
FOR THE CITY OF LINCOLN, NEBRASKA
City Specification No. 07-117

Honorable Mayor and City Council
 City of Lincoln, Nebraska

The undersigned BIDDER, having become familiar with the local conditions affecting the cost of the work, and having carefully examined the Plans, Specifications, Proposal Form, the Form of Contract, Form of Bond, Drawings, Exhibits, and Addenda issued and attached to the Contract Documents on file at the Lincoln Wastewater System, Lincoln, Nebraska, hereby declares that he has reached a full and complete understanding of: (1) the extent and character of the Work covered by this proposal (2) the location, arrangement and specified requirements of and for the proposed Work and other Work appurtenant thereto (3) the location, construction, and condition of existing roads, highways, streets, railroads, pavements, pipelines, conduits, cables, sewers, and other facilities and utilities, both surface and underground which may affect or be affected by the proposed Work (4) the nature and extent of the construction and materials to be used (5) local conditions relative to labor, transportation, hauling, and rail and truck delivery facilities and (6) all other factors and conditions affecting or which may be affected by the specified work.

The undersigned BIDDER proposes to perform everything required to be performed and to provide and furnish all required materials, supplies, tools, equipment, transportation services, plant, and labor required to construct, perform demolition and complete all Work stipulated in, required by, and in accordance with the Plans, Specifications, and other Contract Documents, and any and all other instruments or documents authorized, adopted, required, or referred to in or by any of the Contract Documents, as altered, amended, or modified by any and all addenda thereto, for, and in connection with the Work described in the following Bidding Schedule in connection with the Project known as:

NORTHEAST SALT CREEK BASIN TRUNK SEWER
LINCOLN WASTEWATER SYSTEM

in and for the City of Lincoln, Nebraska, for the sums set forth in the following Bidding Schedule:

CONTRACTOR

BIDDER will complete the Work in accordance with the Contract Documents for the unit prices set forth in the Unit Price Schedule. Quantities indicated are estimated and not guaranteed; they are solely for comparing Bids and establishing the initial Contract Price. Final payment will be based on actual quantities. Basis for measurement and payment is covered in the City of Lincoln Standard Specifications, Section 01065 - Measurement and Payment.

UNIT PRICE SCHEDULE - PHASE 1

ITEM ID	ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL COST
0.4000	1	Mobilization	LS	1	\$	\$
0.2000	2	Construction Staking	LS	1	\$	\$
1.0100	3	Pavement and Sidewalk Removal	CY	18	\$	\$
2.0010	4	General Clearing and Grubbing	LS	1	\$	\$
2.0020	5	Tree Removal (12" to 23")	EA	2	\$	\$
	6	Re-Establish Existing Wetlands	LS	1	\$	\$
	7	Erosion and Sediment Control	LS	1	\$	\$
	8	Traffic Control	LS	1	\$	\$
	9	Gates	EA	1	\$	\$
1.0210	10	Type "A" Sawing	LF	21	\$	\$
1.0220	11	Type "B" Sawing	LF	31	\$	\$
1.0040	12	Asphaltic Concrete Pavement, Class 2 (6" Base)	SY	21	\$	\$
10.0010	13	Crushed Rock Surfacing, (In Place)	TON	1830	\$	\$
	14	Gravel Surfacing (In Place)	TON	275	\$	\$
	15	36" Sanitary Sewer Pipe, Trenchless Installation	LF	280	\$	\$
	16	48" Sanitary Sewer Pipe	LF	60	\$	\$
	17	36" Sanitary Sewer Pipe	LF	6744	\$	\$
	18	18" Sanitary Sewer Pipe	LF	10	\$	\$
22.0050	19	15" Sanitary Sewer Pipe	LF	28	\$	\$
22.0060	20	12" Sanitary Sewer Pipe	LF	20	\$	\$
	21	8" Sanitary Sewer Pipe	LF	20	\$	\$
22.0620	22	Standard Manhole Type "G"	EA	12	\$	\$
22.0630	23	Standard Manhole Type "G"	VF	187	\$	\$
	24	7' Diameter Reinforced Manhole	EA	2	\$	\$
	25	7' Diameter Reinforced Manhole	VF	30	\$	\$
	26	8' Diameter Reinforced Manhole	EA	1	\$	\$
	27	8' Diameter Reinforced Manhole	VF	22	\$	\$
22.0740	28	Concrete for Plugs and Collars (In Place)	CY	4.8	\$	\$

30,0140	29	Seeding, Type "F"	AC	21.1	\$		\$
	30	Seeding, Type "G"	AC	1.2	\$		\$
	31	Siphon Inlet Structure, Complete	LS	1	\$		\$
	32	Siphon Outlet Structure, Complete	LS	1	\$		\$
	33	12" I.D. HDPE Siphon Pipe, Horizontal Directional Drilling	LF	357	\$		\$
	34	16" I.D. HDPE Siphon Pipe, Horizontal Directional Drilling	LF	357	\$		\$
	35	27" I.D. HDPE Siphon Pipe, Horizontal Directional Drilling	LF	357	\$		\$
	36	12" I.D. HDPE Pipe Fitting, 22.5 Deg. Bend	EA	4	\$		\$
	37	16" I.D. HDPE Pipe Fitting, 22.5 Deg. Bend	EA	4	\$		\$
	38	27" I.D. HDPE Pipe Fitting, 22.5 Deg. Bend	EA	4	\$		\$
	39	Remove Abandoned Sanitary Sewer Pipe	LF	382	\$		\$
	40	Remove Abandoned Valve Structure, Complete	LS	1	\$		\$
	41	Over Excavation and Trench Stabilization/Foundation Material	TON	675	\$		\$
	42	Electric or Telephone Utilities Not Shown on the Drawings	LF	100	\$		\$
	43	Water Utilities Less than 4" Dia. Not Shown on the Drawings	LF	100	\$		\$
	44	Storm or Sanitary Sewer Utilities Less than 8" Dia. Not Shown on the Drawings	LF	100	\$		\$
	45	Plug for 48" Sewer Stubout	EA	1	\$		\$
	46	Plug for 36" Sewer Stubout	EA	1	\$		\$
	47	Plug for 18" Sewer Stubout	EA	1	\$		\$
	48	Plug for 15" Sewer Stubout	EA	1	\$		\$
	49	Plug for 12" Sewer Stubout	EA	2	\$		\$
	50	Plug for 8" Sewer Stubout	EA	2	\$		\$

Total Bid Lump Sum (Items 1 through 50 above):

Dollars

(use words)

(\$ _____)
(use figures)

If increases or decreases on these quantities occur, the Contract Price is to be adjusted by Change Order on the basis of the unit prices. Bidder agrees that the unit prices represent full compensation for the labor, material, and equipment required to furnish and install the item, including all allowances for overhead and profit for each type and unit of Work called for.

Adjustment unit prices are subject to acceptance by Owner and rejection of one or more adjustment prices will not invalidate acceptance of this Bid.

Bidder acknowledges that estimated quantities for unit price work are not guaranteed and are solely for the purpose of comparison of Bids. Final payment for all adjustment unit quantities will be based upon actual quantities.

OWNER will award the project on the total Bid Price.

ATTACHED DOCUMENTS:

The following documents are submitted with and made a condition of this Proposal:

- a. Bid Bond, certified check or cashier's check in an amount of 5 percent of BIDDER's maximum Bid Price on form attached, issued by a Surety meeting the requirements of Article II.G. of the General Conditions.
- b. Questionnaire is part of the Bid Form and shall be submitted with all Bids.

BIDDER ACKNOWLEDGEMENTS:

BIDDER accepts the provisions of the liquidated damages in the event of failure to complete the Work within the times specified.

BIDDER agrees that the Work will be substantially completed and ready for final payment within the number of calendar days indicated in the Contract Agreement.

Acknowledgement of Addenda Numbers: _____, _____, _____, _____

AFFIRMATIVE ACTION PROGRAM: Successful BIDDER will be required to comply with the provisions of the City's Affirmative Action Policy (Contract Compliance, Sec. 1.16). The Equal Opportunity Officer will determine compliance or non-compliance with the City's policy upon a complete and substantial review of successful BIDDER's equal opportunity policies, procedures and practices.

SIGNATORY AUTHORITY: The Undersigned signatory for the BIDDER represents and warrants that he has full and complete authority to submit this proposal to the City, and to enter into a contract if this proposal is accepted.

SCHEDULE: By submitting this Proposal, BIDDER acknowledges and agrees to meet all Project completion dates as provided in Section 00500 - Contract Agreement. The undersigned agrees to furnish the required Bonds and enter into an agreement within ten (10) calendar days after Owner's acceptance of this Bid.

BONDING COMPANY: If awarded Contract, BIDDER bonding company will be _____

The full name and address of each person, firm, or corporation interested in the Proposal must be here stated.

NAME: _____	ADDRESS: _____
PHONE NO. _____	EMAIL _____
NAME: _____	ADDRESS: _____
PHONE NO. _____	EMAIL _____
NAME: _____	ADDRESS: _____
PHONE NO. _____	EMAIL _____
NAME: _____	ADDRESS: _____
PHONE NO. _____	EMAIL _____

Dated in _____ this _____ day of _____, 20 _____

SIGNATURE OF BIDDER

IF A CORPORATION

ATTEST:

(Seal)

(Name of Corporation)

(Address)

(City, State, and Zip)

(Phone Number)

By: _____
(Duly Authorized Official)

(Legal Title of Official)

IF OTHER TYPE ORGANIZATION

(Name and Type of Organization)

(Address)

(City, State, and Zip)

(Phone Number)

By: _____
(Member)

(Member)

(Member)

IF AN INDIVIDUAL

(Name)

(Address)

(City, State, and Zip)

(Phone Number)

END OF SECTION

2007/04/11

SECTION 02669 REINFORCED CONCRETE PIPE

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Bar-cage reinforced concrete pipe with O-ring rubber-gaskets and steel joints, double O-ring rubber gaskets with concrete joints, and an internal PVC plastic liner for use as sanitary sewer and manholes.

B. Related Sections include but are not necessarily limited to:

1. Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract.
2. Division 1 - General Requirements.
3. Section 02200 - Earthwork.
4. Section 02221 - Trenching, Backfilling, and Compacting for Utilities
5. Section 02725 - Sanitary Sewer Undercrossings
6. Section 13551 - Concrete Protective Liner - PVC Plastic Liner.
7. Section 02600 - Pipe and Pipe Fittings: Basic Requirements.
8. Section 02312 - Pipe-Jacked Tunnels.
9. Section 02315 - Microtunneling

1.2 QUALITY ASSURANCE

A. Referenced Standards:

1. Reinforced concrete pipe (RCP):

a. ASTM International (ASTM):

- 1) C33, Standard Specification for Concrete Aggregates.
- 2) C76, Standard Specification for Reinforced Concrete Culvert, Storm Drain and Sewer Pipe.
- 3) C150, Standard Specification for Portland Cement.
- 4) C361, Standard Specification for Reinforced Concrete Low-Head Pressure Pipe.
- 5) C443, Standard Specification for Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets.
- 6) C497, Standard Test Methods for Concrete Pipe, Manhole Sections, or Tile.
- 7) C655, Standard Specification for Reinforced Concrete D-Load Culvert, Storm Drain, and Sewer Pipe.
- 8) D2240, Standard Test Method for Rubber Property--Durometer Hardness.

B. Conduct testing methods to evaluate physical properties of pipe in full compliance with ASTM C497 "Determining Physical Properties of Concrete Pipe or Tile."

1. Report full results test showing compliance with referenced standard.

C. Determine acceptability of RCP in all diameters and classes by appropriate ASTM plant tests, including such test to indicate specified design strengths have been met prior to shipment.

1. Conduct three-edged bearing test as specified to determine the loading to produce a 0.01 IN crack extending 12 IN or more.
 - a. Complete bearing test prior to shipment date of lot tested.
2. Conduct crushing test, as specified on cured concrete cylinders.
 - a. Achieve specified 28-day design compressive strength prior to shipment date of lot tested.

3. All pipe in this Section shall be manufactured only in a facility that has a current certificate under the American Concrete Pipe Association's Quality Cost Certification Program for sanitary sewer pipe.

1.3 SUBMITTALS

- A. Provide each pipe, fitting, special appurtenance with a plainly and permanently waterproofed, marked identification.
 1. Include but not necessarily limit markings to the following:
 - a. Size and class of pipe, pressure rating in compliance with referenced standards.
 - b. Date of manufacture.
 - c. Manufacturer's trademark.
 - d. Manufacturer's name.
 - e. Full details on fittings and pipe schedule regarding angles of change, reduction.
 - f. Special notations and tagging of special items in regard to line location.
- B. Shop Drawings:
 1. See Section 01340.
 2. Product technical data including:
 - a. Acknowledgement that products submitted meet requirements of standards referenced.
 - b. Provide sufficient data for the Engineer to properly evaluate the pipe.
 - c. Product data submittals for each size and class of pipe shall include the following, as a minimum:
 - 1) Details of the proposed pipe.
 - 2) Properties and strengths of the pipe.
 - 3) Details of pipe reinforcement, joints, fittings and specials.
 - 4) Pipe design analysis.
 - 5) Instruction on storage, handling, transporting and installation.
 - 6) Standard catalog sheets.
 - d. Tabulated laying schedule.
 - 1) Reference to project stationary and invert elevations.
 - 2) Identify pressure zones, each of design pressure or transient loading zones applicable, and point of change from one zone to another.
 - 3) Pipe diameter.
 - 4) Pipe wall thickness.
 - e. Test reports: Include six (6) copies of D (0.01) - Load and Failure Test Reports, cylinder compression test results, joint tests (if required) and all other tests as required.
 - f. Pipe lining or coating certification letters.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Unless otherwise specified, all materials used in the manufacture of pipe, fittings, and accessories shall conform to ASTM C76.
- B. Fine Aggregate: Shall conform with the requirements of ASTM C33.
- C. Cement: Shall conform with the requirements of ASTM C150, Type II.
- D. Elastomeric Gaskets:
 1. ASTM C361, Section 6.9.1, standard gasket; hardness shall be 40 for double O-ring concrete joints or 60 for steel joints when measured by ASTM D2240, Type A durometer; polymer shall be synthetic rubber.
 2. Natural rubber will not be acceptable.
 3. Gaskets shall be supplied by qualified gasket manufacturers and be suitable for the service intended.

- E. Joint Lubricant: Vegetable base lubricant; petroleum or animal base lubricants will not be acceptable.
- F. Joint Grout:
 - 1. One (1) part portland cement to two (2) parts clean masonry sand mixed to a pouring consistency.
 - 2. The sand shall pass a No. 16 sieve.
- G. Joint Mortar:
 - 1. One (1) part portland cement to two (2) parts clean masonry sand mixed to a stiff consistency.
 - 2. The sand shall pass a No. 16 sieve.
- H. Joint Diapers: Non-woven polypropylene fabric lined with polyethylene foam, at least 9 IN wide.
- I. Rust-Inhibitive Primer: Universal type: Ameron "Amercoat 180 Synthetic Resin Coating" or Carboline "Kop-Coat 340 Gold Primer".
- J. Internal Plastic Liner: As specified in Section 13551.

2.2 BASIS OF DESIGN

- A. RCP for installation by direct bury shall be designed in accordance with C655 using the minimum D-loads shown in the following table.

Minimum Strength Classification vs. Maximum Cover Depth		
Pipe Diameter (inches)	Minimum Design D-Load (to produce 0.01 inch crack)	Maximum Cover Depth (feet)
36	1,350	8
36	2,000	13
36	3,000	16
48	1,350	9
48	2,000	14

- B. Pipe for installation by direct jacking or other special installation conditions shall have a minimum safety factor of 2.5 for all loading conditions.
- C. The absorption of concrete sewer pipe shall not exceed 5.5 percent.
- D. The minimum concrete cover over circumferential reinforcement, except under the spigot groove of pipe with concrete spigots, shall be at least 3/4 IN.
- E. Water-to-cementitious materials ratio of the mortar coating shall not exceed 0.40.
- F. In preparation of concrete pipe layouts, the maximum joint opening shall not exceed 3/8 IN.

2.3 JOINTS

- A. Except as modified herein, joints shall conform to Section 8 of ASTM C361 and shall consist of an O-ring rubber-gasket with steel spigot and bell, a double O-ring rubber-gasket with concrete spigot and bell, or a single O-ring rubber-gasket with concrete spigot and bell.
- B. Pipe sections connecting to manholes or structures shall have a joint in each line within 4 FT of the inside face of each manhole or structure.

- C. O-ring rubber-gaskets with steel spigots and bells.
 - 1. All surfaces of steel joint rings exposed in finished pipe shall be protected from corrosion by a shop-applied coat of rust-inhibitive primer or by a coating of metallic zinc at least 0.004 IN thick applied by the metalizing process.
 - 2. Steel bell-and-spigot joint rings shall be welded to the longitudinal reinforcing steel or anchored with at least six 1/2 IN DIA bars, 24 IN long, welded to the joint rings.
 - 3. The distance from the face of the spigot to the shoulder of the spigot shall be at least 3/8 IN greater than the joint depth (the distance from the face of the bell to the seat of the bell).
- D. O-ring rubber-gaskets with concrete joints alternative.
 - 1. Rubber and concrete joints shall consist of a formed concrete bell and spigot and a rubber gasket.
 - a. Gaskets shall have a circular cross section and shall be confined in a groove in the pipe spigot.
 - b. Pipe with collars instead of integral bells will not be acceptable.
 - c. All pipe shall maintain the minimum allowed wall thickness at the connection between the bell and the pipe barrel. This thickness shall be accomplished by providing a raised bell or increasing the pipe barrel to the thickness of raised bell.
 - 2. Each concrete pipe joint shall be designed to withstand, without cracking, the gasket compression plus a differential load across the joint equal to 4,000 LBS/FT of internal diameter.
 - 3. Double O-ring rubber-gaskets with concrete joints:
 - a. Shall include provisions for two (2) O-ring rubber-gaskets and a testing port.
 - b. The testing port, with threaded PVC plug, shall be provided for testing the annular space between the two (2) rubber gaskets.

2.4 DIMENSIONS

- A. Wall Thickness shall be not less than Wall B.

2.5 REINFORCEMENT

- A. Circumferential reinforcement shall be full-circle type.
 - 1. Elliptical or part-circle reinforcement will not be acceptable.
- B. The total area of longitudinal steel shall be not less than 0.2 percent of the concrete cross-sectional area of the pipe.
 - 1. Longitudinal steel shall be spaced uniformly around the pipe and shall consist of at least eight (8) continuous or lap spliced (20 bar diameters for deformed bars or 40 bar diameters for smooth bars) wires or bars in each cage; splices shall not be welded.
 - 2. Longitudinal bars shall not be spaced more than 30 IN apart.
- C. At least three (3) circumferential bars shall be provided in each pipe bell.
 - 1. The bars shall be placed within 1-1/2 times the socket depth from the end of the pipe and shall be equal in area to an equivalent length of the outside cage in the pipe barrel.
 - 2. The end circumferential bar shall be placed 1 IN from the face of the bell.
- D. The inside cage (or the single cage) in the pipe barrel shall be extended to within 1 IN of the end of the spigot on 24 IN and larger pipe, and to within 1/2 IN of the gasket groove on pipe smaller than 24 IN in diameter.

2.6 FITTINGS

- A. All bends, tees, closure pieces, wall fittings, and other fittings which are indicated on the Drawings or required to complete the work shall be furnished.
 - 1. Except as modified or otherwise provided herein, the design and manufacture of fittings shall be governed by the same requirements as the connecting piping.
- B. Bends:

1. At the option of the Contractor, bends for concrete sewer pipe shall be fabricated from segments of a steel cylinder, with concrete or mortar lining and reinforced concrete exterior covering, or from segments of concrete pipe miter-cut while the pipe is still green.
 - a. The deflection angle between adjacent segments shall not exceed 30 degrees.
 2. Steel cylinders for bends shall be at least USS 10 gage and shall be lined with at least 3/4 IN of mesh-reinforced concrete or mortar.
 - a. Bends fabricated from steel cylinders shall be designed for the same three-edge bearing loads as the adjacent piping.
 3. On bends fabricated from miter-cut segments of green concrete pipe, the concrete shall be removed from around the reinforcing steel as necessary, the steel shall be welded, and the bend shall be re-covered with concrete.
 - a. After installation, the entire bend shall be encased in concrete.
 - b. Concrete encasement shall be at least 8 IN thick all around the pipe and shall extend the full length of the bend.
- C. Wall Fittings:
1. Bell type wall fittings shall be provided at the locations indicated on the Drawings.
 2. Wall fittings shall be of the required length, shall have bells to match the joints on the pipe, and shall be fabricated by the manufacturer of the pipe to which they connect.
- D. Outlets: Fabricated outlet branches shall be provided for tee-based manholes as indicated on the Drawings.
- E. Closure Pieces:
1. Shop fabricated closure pieces shall be furnished.
 2. The closure pieces may be cut in the field in accordance with the manufacturer's recommendations.
 3. Following installation, each closure piece shall be encased in at least 6 IN of mesh-reinforced concrete.
 4. All exposed metal surfaces inside each closure piece shall be protected with joint mortar.

2.7 CURING

- A. Prior to delivery to the site, concrete pipe and fittings shall be cured in the manufacturer's facilities until concrete control cylinders representing such pipe have attained a compressive strength of at least 80 percent of the specified minimum 28 day strength.

2.8 PRELIMINARY TESTS

- A. All preliminary tests shall be made at the Contractor's expense.
1. Reports covering the following joint leakage and shear tests on each size of pipe, and the three-edge bearing and absorption tests on each size and class of pipe, shall be submitted to the Engineer for review:
 - a. Joint leakage: ASTM C443, Section 10.
 - b. Three-edge bearing: ASTM C497, indicating load required for 0.01 IN crack.
 - c. Absorption: ASTM C497.
 - d. Joint shear (where rubber and concrete joints are used): Suitable arrangements to apply the specified loads.
 - 1) A pipe joint shear test shall be performed on the first 400 FT of pipe produced.
 - a) As long as joint design remains constant for all additional pipe manufactured, no further shear test will be required.
 - 2) The shear load for the pipe joint shear test shall be 4,000 LBS/FT of nominal diameter and shall be uniformly applied over an arc of not less than 120 degrees along a longitudinal distance of 12 IN.
 - a) The assembled pipe shall rest on three (3) supports.
 - b) A support shall be located at each extreme end of the assembly.
 - c) The third support shall be placed within 14 IN of the joint.

- d) The shear load shall be placed on a loading block (cradle) immediately adjacent to the joint.
 - e) During these tests, the ends of the tested pipe shall be restrained only in the amount necessary to prevent longitudinal movement, and there shall be no joint leakage when tested.
- 3) Upon removal of the test load and the disassembly of the joint, neither the bell nor the spigot shall show permanent deformation or damage.
- a) If any joint tested should fail, two (2) additional joints shall be tested.
 - b) Failure of any of the additional joints so tested shall be cause for the rejection of that 400 FT of manufactured pipe and further production of new pipe will require the Engineer's approval.

2.9 CONTROL TESTS

- A. Test Reports: Submit test reports performed and prepared by an Independent Testing Laboratory certifying that the pipe has been tested in accordance with and exceeds the requirements of the specified standards. At the Contractor's option, the pipe manufacturer may perform all of the specified testing at their facility, however; in exercising this option, the Contractor will be responsible for payment of all travel, meals, lodging, and other expenses for two Owner designated representatives to witness the testing at the pipe manufacturer's facility. All pipe testing and reports shall be done at the Contractor's expense.
- B. Control tests shall be made during the manufacture of the pipe.
- C. At the option of the Contractor, strength tests may be made on cores or on standard concrete cylinders.
 - 1. A set of two (2) cores or four (4) cylinders shall be taken from each day's production and each time the concrete mix is changed.
 - 2. One-half (1/2) of the samples shall be tested at seven (7) days or earlier to determine when the pipe has attained sufficient strength for delivery.
 - 3. The remainder shall be tested at 28 days.
- D. Absorption tests shall be made on cores taken from the pipe barrel.
 - 1. Cores shall be at least 2 IN in diameter and shall be taken with a diamond drill.
 - 2. One (1) core shall be tested from each of the first three (3) lengths of pipe of each size and class.
 - 3. Additional cores shall be tested from 5 percent of the pipe produced, but not less than one (1) from each day's production.
- E. Core holes shall be repaired by cementing a properly shaped concrete plug in place with epoxy cement or by other methods acceptable to the Engineer.
- F. The Owner reserves the right to sample and test any pipe after delivery and to reject all pipe represented by any sample which fails to comply with the specified requirements.
- G. All work performed and material provided may be inspected by the purchaser or the purchaser's representative, but such inspection shall not relieve the manufacturer of responsibility to provide material and perform work in accordance with the standards.
 - 1. If the purchaser desires to inspect the pipe or witness the tests, reasonable notice shall be given by the manufacturer as to the time at which the inspection may be made.
- H. The purchaser or the purchaser's representative shall have access at all reasonable times to those parts of the manufacturer's plant involved in the manufacture of the material ordered while work for the purchaser is being performed.
 - 1. The manufacturer shall provide the purchaser with the facilities necessary to determine that the material is being provided in accordance with this specification.
 - 2. All tests and inspections shall be made prior to shipment.

2.10 COATINGS

- A. Interior Pipe Coating:
 - 1. Plastic lined RCP: As specified in Section 13551.
- B. Other Protective Coatings: Coat exposed metal surfaces, steel joint rings, flange connection outlets, and other metal surfaces with self-curing inorganic zinc coating to a finished dry thickness of 2 mils.

PART 3 - EXECUTION

3.1 INSTALLATION

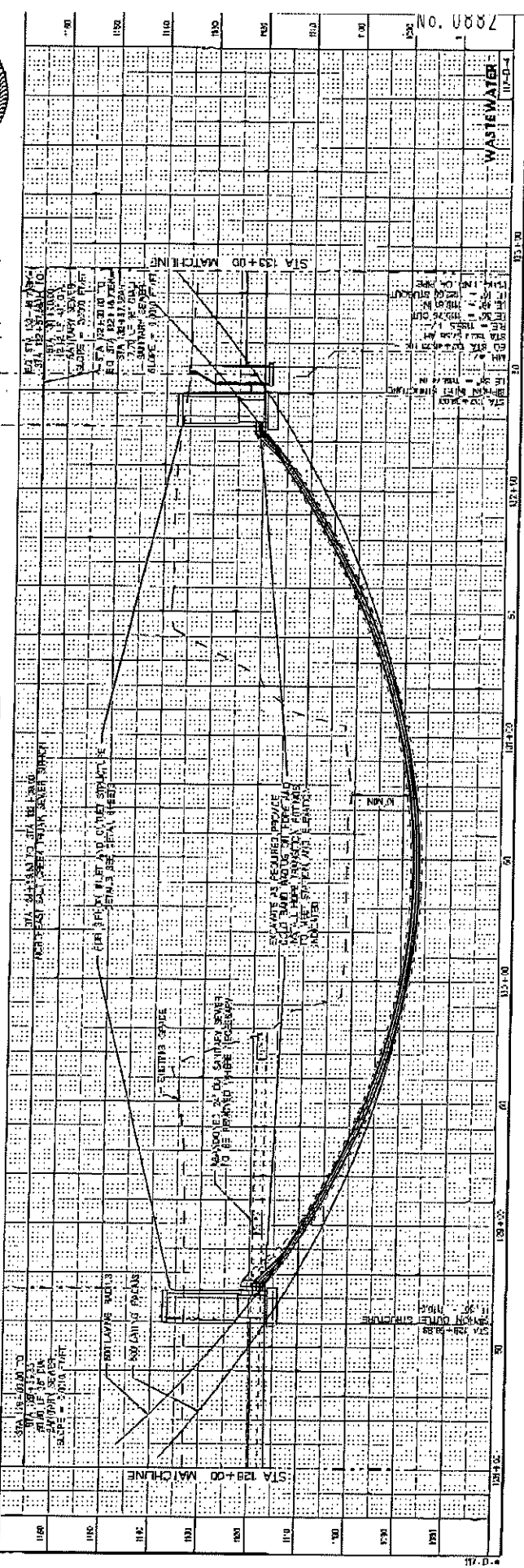
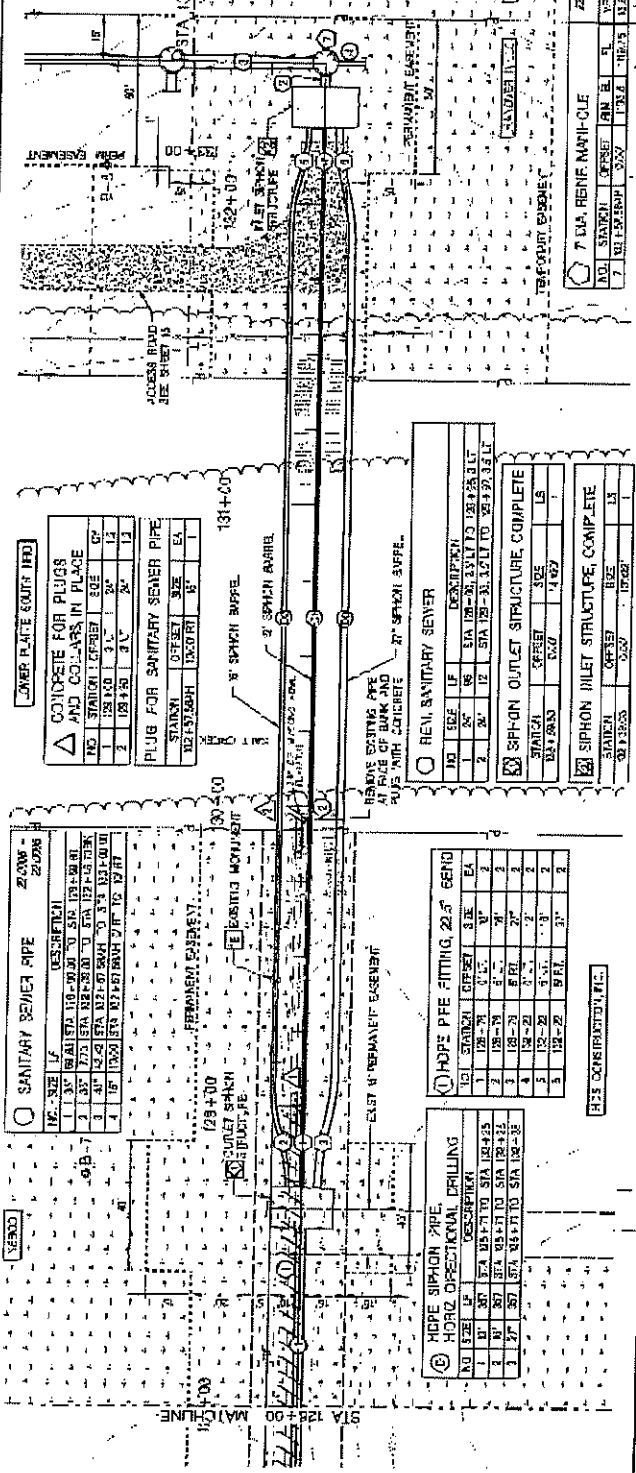
- A. The manufacturer shall furnish a suitable qualified field service representative to be present periodically during the first week of pipe installation and as requested by Engineer.
- B. Pipe Handling:
 - 1. Concrete pipe and fittings shall be handled carefully and shall not be bumped or dropped.
 - 2. Hooks shall not be permitted to come in contact with joint surfaces.
 - 3. Use of lifting holes will not be permitted.
 - 4. Use textile slings or other suitable means recommended by pipe manufacturer.
- C. Jointing:
 - 1. Clean ends of pipe and coupling components.
 - 2. Check pipe ends and couplings for damage.
 - a. Correct any damage found.
 - 3. Coupling grooves must be completely free of dirt.
 - 4. Apply joint lubricant to pipe ends and rubber seals of coupling.
 - a. Use only lubricants approved by the pipe manufacturer.
 - 5. Use suitable auxiliary equipment, such as a wire rope puller, to pull pipe joints together.
 - 6. Do not exceed forces recommended by the manufacturer for pipe.
 - a. If excessive force is required, remove pipe and determine source of problem.
 - b. The pipe section causing the problem shall be rejected.
 - c. Pipe joints as manufactured shall be of adequate quality and dimensional tolerances so as to fit together without the use of excessive force or field modifications.
 - d. All pipe joints that cannot be installed without the use of excessive force or that fail their initial air test after jointing, shall be rejected and not used.
 - e. The field modification of pipe joints that cannot be installed without the use of excessive force or by grinding, reshaping, or any other techniques shall not be allowed.
 - 7. In the process of jointing the pipe, do not allow the deflection angle to exceed the deflection permitted by the manufacturer.
 - 8. Fill each exterior rubber and steel joint recess with joint grout for pipe installed by trenching.
 - a. Use joint diaper to prevent foreign material from entering the joint recess before grouting and to serve as a form for the grout.
 - b. Each diaper shall be of sufficient length to encircle the pipe, leaving enough space between the ends to allow the grout to be poured.
 - c. Joint grout shall be poured between the diaper and the pipe and shall be allowed to run down to the bottom of the pipe.
 - d. The grout shall be rodded while being poured, using a stiff wire curved to the approximate shape of the pipe.
 - e. Each joint recess shall be completely filled with grout for the full circumference of the pipe.
 - 9. Prior to grouting the exterior of rubber and steel pipe joints, not less than two lengths of pipe shall be in final position or the pipe shall be backfilled sufficiently to brace and secure it from displacement.
 - a. Contractor shall prevent damage to exterior joint grout from pipe laying operations or backfilling.

- b. If placing of pipe embedment is resumed before the grout has attained initial set, care shall be taken to prevent damage to the grout while placing and compacting embedment material.
- 10. After trench backfilling has been completed, the pipe has passed its final joint test, and prior to welding the liner joint flaps into place, the inside joint recess of all pipe with rubber and steel joints shall be filled with joint mortar.
 - a. Joint surfaces shall be damp, but free from surface water, when the mortar is placed.
 - b. Mortar shall be thoroughly compacted to completely fill the recess and shall be finished smooth.
 - c. All excess mortar shall be removed from the pipe.
- 11. The Contractor shall air test the annular space between double gaskets using the integral testing port.
 - a. Pipes shall be tested and retested in accordance with the following requirements until acceptable to the Engineer.
 - b. All pipe shall be joint-tested twice, both prior to and after backfill has been placed.
 - c. Prior to placement of backfill, the joint shall be tested in a sequential operation with test conducted on each joint as they become available (two (2) or three (3) pipe sections behind the last pipe section being installed), or as directed by the Engineer, in order that the pipe laying operations shall have no adverse effect upon the security of the completed joint after the initial test.
 - d. Prior to backfill operations, the isolated joint shall be pressurized to 10 psi above the pressure exerted by the theoretical groundwater elevation to the ground surface above the pipe, measured at the top of the pipe joint.
 - 1) If the pressure holds or drops less than 1 psi in 30 seconds, the joint shall be deemed as passing this test.
 - e. After backfill operations, the isolated joint shall be pressurized to 10 psi above the pressure exerted by the theoretical groundwater elevation to the ground surface above the pipe, measured at the top of the pipe joint.
 - 1) If the pressure holds or drops less than 1 psi in 30 seconds, the joint shall be deemed as passing this test.
 - f. If the initial joint pressure test fails, the pipe joint shall be pressurized to 10 psi, maintained for two (2) minutes, the pressure relieved, and then the joint retested.
 - g. When individual joints have been tested and accepted by the Engineer, the testing air stem and port shall be securely capped with a plug.
 - h. The Contractor shall furnish all labor, materials, tools, and equipment necessary to conduct the tests as described herein and shall perform all incidental work as required.
 - 1) Contractor's pressure gauges shall be of a type, calibration, and accuracy that are acceptable to the Engineer.
 - 2) Contractor shall furnish Engineer a certification of the gauge's accuracy by a testing firm acceptable to the Engineer, if requested by Engineer.

3.2 CONNECTIONS WITH EXISTING WORK

- A. See Section 02600, paragraph 3.3.

END OF SECTION





	HAR Engineering, Inc.	
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	DIP-FLAME	
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NO.	REF.	LF	DESCRIPTION
1	36	138418	SFA 160+2000 TO STA 164+2019
2	36	138419	SFA 164+2019 TO STA 164+2020
3	36	138420	SFA 164+2020 TO STA 164+2020
4	36	138421	SFA 164+2020 TO STA 164+2020
5	36	138422	SFA 164+2020 TO STA 164+2020
6	36	138423	SFA 164+2020 TO STA 164+2020
7	36	138424	SFA 164+2020 TO STA 164+2020
8	36	138425	SFA 164+2020 TO STA 164+2020
9	36	138426	SFA 164+2020 TO STA 164+2020
10	36	138427	SFA 164+2020 TO STA 164+2020
11	36	138428	SFA 164+2020 TO STA 164+2020
12	36	138429	SFA 164+2020 TO STA 164+2020
13	36	138430	SFA 164+2020 TO STA 164+2020
14	36	138431	SFA 164+2020 TO STA 164+2020
15	36	138432	SFA 164+2020 TO STA 164+2020
16	36	138433	SFA 164+2020 TO STA 164+2020
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33	36	138450	SFA 164+2020 TO STA 164+2020
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53	36	138470	SFA 164+2020 TO STA 164+2020
54	36	138471	SFA 164+2020 TO STA 164+2020
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56	36	138473	SFA 164+2020 TO STA 164+2020
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58	36	138475	SFA 164+2020 TO STA 164+2020
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60	36	138477	SFA 164+2020 TO STA 164+2020
61	36	138478	SFA 164+2020 TO STA 164+2020
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66	36	138	

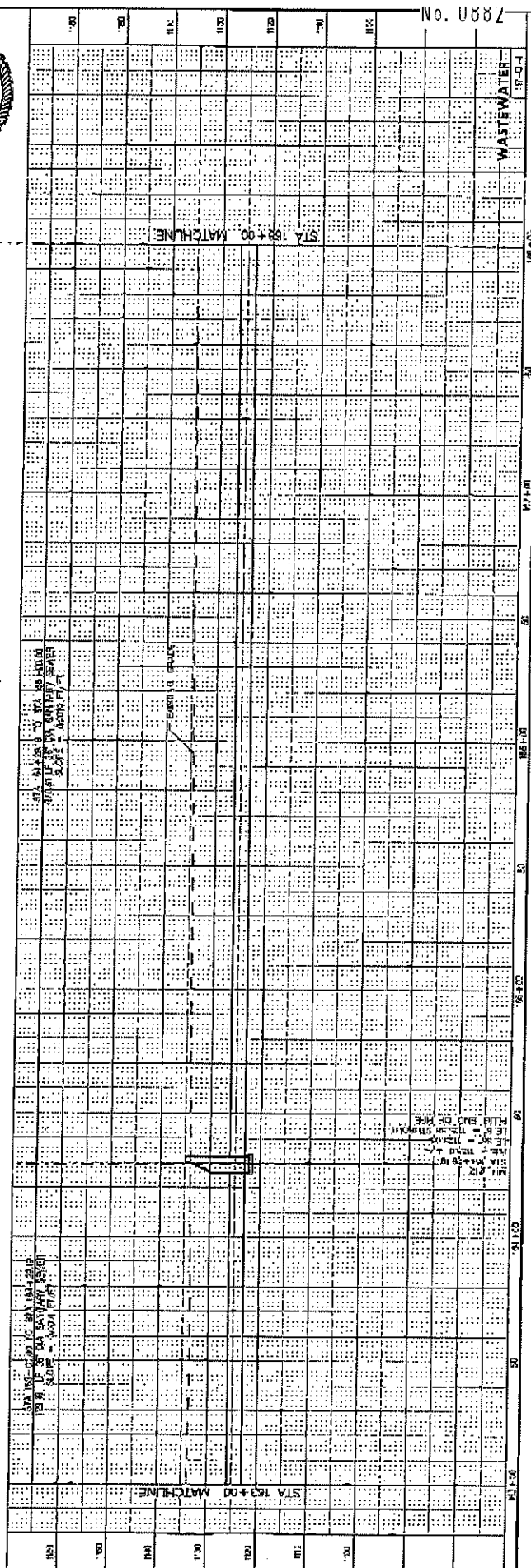
STD. MATCHCOLE T.V. G						20/05/2020	
NO.	STATION	CITYSET	FM	EL	P.	'JF	EA
12	IR4-20.40	0.00	NRSD	123.21		12.0	1

SEEDING, TYPE "C"	SIZE	PC
MINIMUM TO STATION	17.3 Ht.	16A
REL-TO-0 - 148-01.2		

ASBESTOS CEMENTITY BELLS ALL TEMPORARY
AND PERMANENT SUBSTITUTES

Имя: Кудрявцев Александр
Фамилия: Кудрявцев Александр
Пол: Мужской
Дата рождения: 09.08.1976

SUNBELT REAL ESTATE LLC



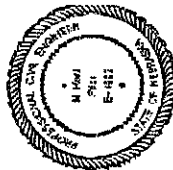


PROJECT NO. 17-01-1
 DATE: 10/1/03
 DRAWN BY: J. H. HARRIS
 CHECKED BY: J. H. HARRIS
 SCALE: 1" = 40'

TYPE 'A' SAWING	
STATION TO STATION	SIZE
173+00 TO 173+14	12"
173+14 TO 173+28	18"

PLUG FOR SANITARY SEWER PIPE	
STATION	SIZE
173+00 TO 173+14	12"
173+14 TO 173+28	18"

SANITARY SEWER PIPE	
STATION	SIZE
173+00 TO 173+14	12"
173+14 TO 173+28	18"



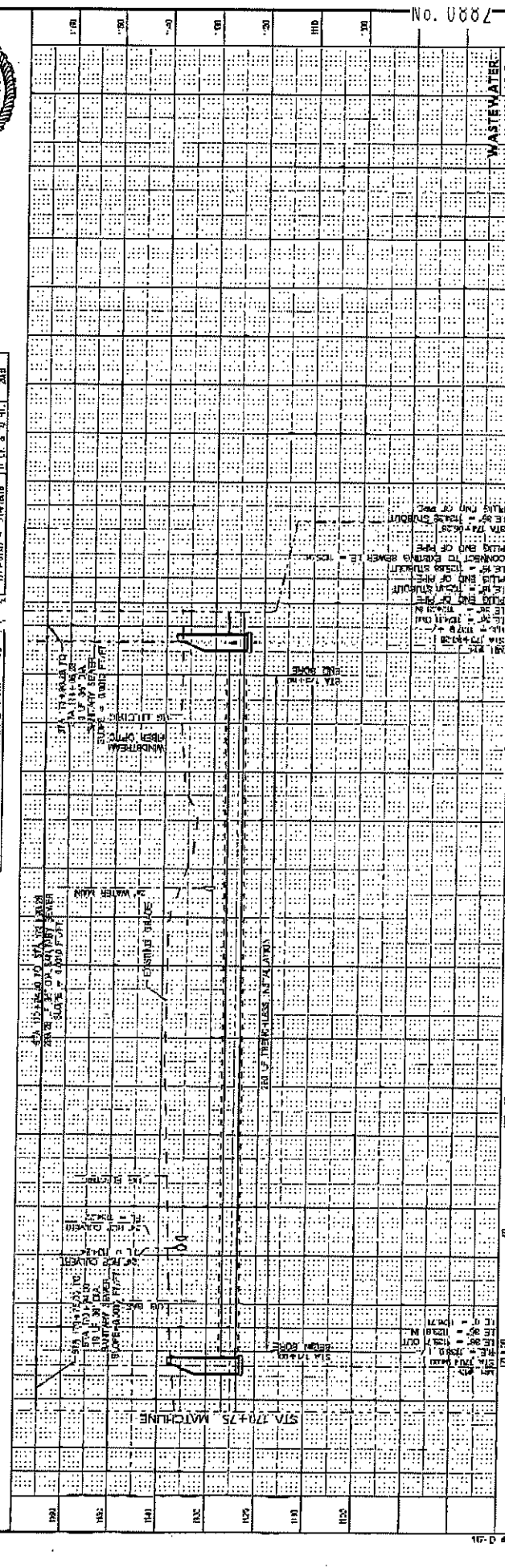
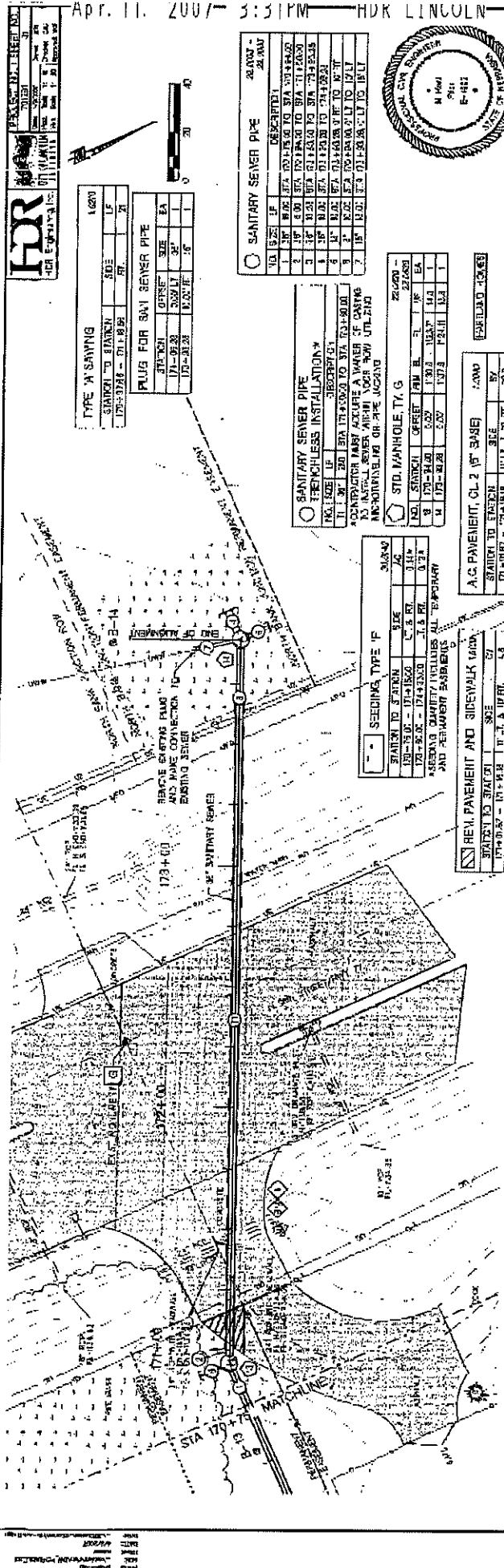
SANITARY SEWER PIPE	
STATION	SIZE
173+00 TO 173+14	12"
173+14 TO 173+28	18"

STD. MANHOLE, T.Y. G.	
STATION	SIZE
173+00 TO 173+14	12"
173+14 TO 173+28	18"

AC PAVEMENT, OL 2 1/2" BASE	
STATION TO STATION	SIZE
173+00 TO 173+14	12"
173+14 TO 173+28	18"

SEEDING TYPE 'F'	
STATION TO STATION	SIZE
173+00 TO 173+14	12"
173+14 TO 173+28	18"

REV. PAVEMENT AND SIDEWALK MATCH	
STATION TO STATION	SIZE
173+00 TO 173+14	12"
173+14 TO 173+28	18"



STATION	PIPE INVERT	GROUND SURFACE
173+00	173.00	173.00
173+05	173.05	173.05
173+10	173.10	173.10
173+15	173.15	173.15
173+20	173.20	173.20
173+25	173.25	173.25
173+28	173.28	173.28

Plan Holders List
 City of Lincoln, Nebraska
 NE 3rd Creek Basin Trunk Sewer
 City of Lincoln Specification No. 07-117
 HDR Project No. 44333
 City Project No. 701291

COMPANY	PHONE NO.	ADDRESS	CITY/STATE/ZIP	CLASSIFICATION	FAX NO.	SET NO.	ADDENDA NO. 1 ISSUED
HDR ENGINEERING, INC. LINCOLN WASTEWATER SYSTEM	402-742-2800	301 S. 13TH STREET, SUITE 701	LINCOLN, NE 68508	ENGINEER	402-742-2800	1 SET	4/11/2007
LINCOLN PURCHASING DIVISION- PURCHASING AGENT	402-441-7881 402-441-7410	2400 THERESA STREET SUITE 200, K STREET COMPLEX 440 SOUTH 8TH STREET	LINCOLN, NE 68521 LINCOLN, NE 68508	OWNER	402-441-8735	5 SETS	4/11/2007
ENGINEERING SERVICES	402-441-7711	531 WESTGATE BLVD., SUITE 100	LINCOLN, NE 68528	OWNER	402-441-8513	1 SET	4/11/2007
LINCOLN BUILDER'S BUREAU	402-421-8332	6910 SOUTH 56TH STREET	LINCOLN, NE 68618	PLAN HOUSE	402-441-8578	2 SETS	4/11/2007
McGRAW HILL-DODGE REPORTS	402-406-0577	8529 K STREET ARCADE DIGITAL BUILDING	LINCOLN, NE 68618	PLAN HOUSE	402-421-8334	1 SET	4/11/2007
PLAINS BUILDERS EXCHANGE	606-334-8066	220 NORTH KIWANIS	OMAHA, NE 68134	PLAN HOUSE	402-453-0888	1 SET	4/11/2007
OMAHA BUILDERS EXCHANGE	402-593-6908	4255 SOUTH 64TH STREET	SIOUX FALLS, SD 57104	PLAN HOUSE	606-334-0112	1 SET	4/11/2007
HORIZONTAL BORING & TUNNELING CO.	402-286-5347	545 S. RIVER AVENUE PO BOX 428	OMAHA, NE 68127	PLAN HOUSE	402-593-6812	1 SET	4/11/2007
H.R. BOONSTROM CONSTRUCTION	402-164-4342	8401 N. 60TH STREET	EXETER, NE 68351	SUBCONTRACTOR	402-296-8491	1 SET	4/11/2007
ROL OFF CONSTRUCTION	402-881-1721	10204 S. 152ND STREET	LINCOLN, NE 68507	CONTRACTOR	402-484-1848	1 SET	4/11/2007
OSBORN CONSTRUCTION	402-484-4253	8801 JOHANNA ROAD	OMAHA, NE 68138	CONTRACTOR	402-351-1752	1 SET	4/11/2007
GARNEY COMPANIES, INC.	818-746-7203	1333 NW VISION ROAD	LINCOLN, NE 68507	CONTRACTOR	402-484-5077	1 SET	4/11/2007
JUDDS BROTHERS CONSTRUCTION CO.	402-467-4866	3838 N. 68TH STREET	KANSAS CITY, MO 64118	CONTRACTOR	818-746-7288	1 SET	4/11/2007
DOBSON BROTHERS CONSTRUCTION	402-474-5116	410 S. 7TH STREET	LINCOLN, NE 68507	CONTRACTOR	402-467-4782	1 SET	4/11/2007
HOBAS	515-308-4000	1413 E. RICHEY ROAD 3032 CO RD 138 PO BOX 399	LINCOLN, NE 68501	CONTRACTOR	402-435-4002	1 SET	4/11/2007
S. J. LOUIS CONSTRUCTION	320-253-9291	8701 CORNHUSKER HIGHWAY	HOUSTON, TX 77073	SUPPLIER	281-821-7715	1 SET	4/11/2007
GENERAL EXCAVATING	402-467-1627	6414 SOUTH 84TH	WAITE PARK, MN 56387	CONTRACTOR	320-250-3633	1 SET	4/11/2007
GRIFFIN DEWATERING KING CONTRACTING COMPANY INC.	402-331-5000	2801 ONEIL DRIVE PO BOX 83	LINCOLN, NE 68507	CONTRACTOR	402-467-2084	1 SET	4/11/2007
M.E. COLLINS CONTRACTING CO., INC.	402-478-3030	12303 HIGHWAY 6 5204 SPUR 85-0 PO BOX 327	OMAHA, NE 68127	SUBCONTRACTOR	402-231-3038	1 SET	4/11/2007
PAVERS INC.	402-443-1883	640 E 26TH STREET	LINCOLN, NE 68518	CONTRACTOR	402-421-3801	1 SET	4/11/2007
PAVERS INC.	402-788-5980	WAVERLY, NE 68482	WAHOO, NE 68064	SUBCONTRACTOR	402-448-5013	1 SET	4/11/2007
WILLIAMS DRILLING	402-788-8098	5125 EAST UNIVERSITY AVENUE	WAVERTY, NE 68482	CONTRACTOR	402-788-5920	1 SET	4/11/2007
MILLER THE DRILLER	515-468-2281	6125 EAST UNIVERSITY AVENUE	BEVERLY, NE 68315	SUBCONTRACTOR	402-788-8098	1 SET	4/11/2007
			PLEASANT HILL, IA 50327	SUBCONTRACTOR	515-266-1349	1 SET	4/11/2007